

WHAT IS CLAIMED IS:

1. An electric wire comprising:  
a conductive portion being made of an electric conductive material; and  
predetermined amount of voids, being provided in the vicinity of the surface of the conductive portion along lengthwise the conductive portion.
2. The electric wire according to claim 1, wherein the conductive portion is made of any of a metal such as copper, aluminum, iron or an alloy of them, plastic with dispersed electric conductive particles, such as metal fiber or carbon black, electric conductive plastic such as electric conductive polymeric organic substance, or non-metallic electric conductors.
3. The electric wire according to claim 1, wherein the cross section of the conductive portion is formed into any shape selected from a group of round, square, rectangular, trapezoid, pentagon, hexagon, octagon or the other polygon.
4. The electric wire according to claim 1, wherein the conductive portion is made of any of a metal such as copper, aluminum, iron or an alloy of them, plastic with dispersed electric conductive particles, such as metal fiber or carbon black, electric conductive plastic such as electric conductive polymeric organic substance or non-metallic electric conductors, wherein the cross section of the conductive portion is formed into any shape selected from a group of round, square, rectangular, trapezoid, pentagon, hexagon, octagon or the other polygon.